

- 24 -

[CLAIMS]

1. A method of making a heat-sensitive lithographic printing plate precursor comprising the steps of
 - (i) providing a web of a lithographic support having a hydrophilic surface;
 - (ii) applying a coating comprising a phenolic resin on the hydrophilic surface of the web;
 - (iii) drying the coating;
 - (iv) a heating step wherein the web temperature is maintained above 150°C during a period of between 0.1 and 60 seconds;
 - (v) winding the precursor on a core or cutting the precursor into sheets.
2. A method according to claim 1 wherein during the heating step the web temperature is maintained above 170°C during a period of between 1 and 30 seconds.
3. A method according to claim 1 or 2 wherein the heating step is carried out by blowing hot air or steam onto the precursor.
4. A method according to claim 1 or 2 wherein the heating step is carried out by exposing the precursor to infrared or microwave radiation.
5. A method according to any preceding claims further comprising a cooling step between step (iv) and step (v).
6. A method according to claim 5 wherein during the cooling step the web temperature of the precursor is reduced at an average cooling rate which is higher than if the precursor would be kept under ambient conditions.
7. A method according to claim 6 wherein said average cooling rate is at least 0.5°C/s.
8. A method according to any of claim 5 to 7 wherein during the cooling step the web temperature is reduced from T1 to T2, T1

- 25 -

being higher than T_g and T_2 being lower than T_g , at an average cooling rate which is lower than 10°C/s , T_g being the glass transition temperature of the coating comprising the phenolic resin.

- 5 9. A method according to any of claim 8 wherein during the cooling step the web temperature is reduced
- in a first phase down to T_1 at an average cooling rate of at least 10°C/s ;
 - 10 - in a second phase from T_1 to T_2 at an average cooling rate which is lower than 10°C/s ;
 - in a third phase from T_2 to about ambient temperature at an average cooling rate of at least 10°C/s .

10. A method according to claim 8 or 9 wherein T_1 is $T_g+20^\circ\text{C}$ and T_2 is $T_g-20^\circ\text{C}$.